



ACTUARY'S REPORT 2009

Plans B & C

PRICEWATERHOUSECOOPERS 

Michigan Education Trust
Plans B and C
Actuary's Report
As of September 30, 2009

January 2010

January 15, 2010

Rick Kaye, Owner
Richard M. Kaye & Associates
PricewaterhouseCoopers Plaza
1900 St. Antoine Street
Detroit, MI 48226

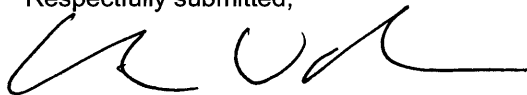
Dear Mr. Kaye:

At your request, PricewaterhouseCoopers LLP (PwC) has performed an actuarial valuation of Plans B and C (MET I) of the Michigan Education Trust (MET or the Trust), at the request of the Trust as of September 30, 2009. The valuation is based on data furnished by MET regarding the contracts submitted during the 1988, 1989 and 1990 enrollment periods; unaudited financial data provided by MET; the actuarial basis described herein and the contract provisions in effect for the 1988, 1989 and 1990 enrollments.

This report presents the results of the valuation of the assets and liabilities of MET I in compliance with Act Number 316 of the Public Acts of 1986 and contains information required for financial statement purposes.

The actuarial valuation was performed based upon generally accepted actuarial principles, using assumptions as specified by the Board of the Michigan Education Trust. This report is prepared for the internal use of the Michigan Education Trust. Any external use or distribution of this report is not authorized without prior written approval of PwC.

Respectfully submitted,



Christopher Walker, FCAS, MAAA
Principal, PricewaterhouseCoopers LLP



Michael E. Mielzynski, FCAS, MAAA
Manager, PricewaterhouseCoopers LLP

Michigan Education Trust

Plans B and C

Actuary's Report

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SECTION I – SUMMARY

This report presents the results of the September 30, 2009 actuarial valuation of Plans B and C of the Michigan Education Trust. The valuation is based on contract data provided by MET and unaudited financial information provided by MET.

This section presents a summary of the valuation results and the funded status of Plans B and C at September 30, 2009.

A. Actuarial Valuation Highlights

| | <u>Plan B</u> | <u>Plan C</u> |
|---|---------------------|--------------------|
| 1. Net market value of assets * | \$296,479,209 | \$2,721,384 |
| 2. Expected present value of the tuition benefit, mandatory fees benefit, and administrative expense liabilities of the Trust, assuming the fund earns 2.2 percent annually | \$275,546,785 | \$1,152,005 |
| 3. Estimated Surplus (Unfunded Liability) as of September 30, 2009 | <u>\$20,932,424</u> | <u>\$1,569,379</u> |

B. Funded Status

The estimated funded status of MET I is derived by comparing the market value of assets with the expected present value of the tuition benefit, mandatory fees benefit, and administrative expense liabilities of the Trust, assuming the fund earns 2.2 percent annually. Accordingly, based upon the assumptions and methods stated in Section V and further described in the following section, as of September 30, 2009, Plan B shows a surplus of \$20,932,424 and Plan C shows a surplus of \$1,569,379 (A-1 less A-2). Overall, the program is 108.1% funded.

It should be noted that the investment return and tuition and fees inflation assumptions have been changed since the prior valuation. The current valuation assumes a 2.2 percent annual rate of return; last year's valuation assumed a 4.75 percent annual return. The tuition and fees inflation assumption was 7.3 percent per year in our prior valuation; the current assumption is 6.5 percent per year. Using the assumptions from last year's valuation, the estimated surplus for Plans B & C combined is \$33.4 million.

Excluding assumption changes as noted above, the largest drivers of change in the estimated surplus from one valuation to the next are the differences between the assumed and the observed rates for both investment return and tuition and fees inflation. Last year, assets were assumed to appreciate at a rate of 4.75 percent; the actual return from September 30, 2008 to September 30, 2009 was 4.46 percent, lagging expectations by approximately \$1.1 million. Last year, tuition and fees inflation was assumed to be 7.3 percent; the actual increase from 2008 to 2009 was 6.3 percent, decreasing estimated liabilities by approximately \$3.3 million.

* Using market value of bonds.

SECTION I – SUMMARY

(continued)

C. Assumptions

This valuation is based on the assumptions and methods stated in Section V.

It should be kept in mind that the soundness determination of MET is based upon many assumptions. There is considerable uncertainty surrounding the significant factors that affect the solvency of the Trust.

The most significant assumptions are the discount rate, the rate of increase in tuition, and selection against the Trust by purchasers and beneficiaries. The discount rate was determined based upon the schedule of bonds forwarded by the Michigan Department of Treasury, Bureau of Investments and approved by the Board. The other assumptions were adopted by the MET Board based upon an analysis of alternatives.

It is premised that expected benefit payments will be diversified in duration to allow MET to invest at the assumed investment yield. It is also premised that MET will be able to liquidate its investments in order to meet future benefit payments while still earning the investment yields that are assumed within this report. Any deviation in the actual investment yield from the expected investment yield may materially affect the conclusions within this report.

Investment Yield

The investment yield is the long-term earnings rate expected from the assets of the Trust. The investment yield is net of any investment expenses charged to the Trust.

MET's investment policy objectives include: the avoidance of volatility, the preservation of the real value of the fund, and the maximization of the expected yield. The investment strategy focuses on investment grade fixed income securities.

The investment yield assumption is based on the earnings of the existing portfolio together with estimates of the yields that will be available on reinvestment of income.

Exemption from Federal Income Taxation of the Trust

Section 529 of the Internal Revenue Code, added by the Small Business Job Protection Act of 1996, H.R. 3448, exempts Qualified Tuition Plans from Federal income tax. MET has received a determination letter from the IRS stating that MET meets the Section 529 requirements.

On November 8, 1994, the U.S. Court of Appeals for the Sixth Circuit ruled that MET is not liable for Federal income taxes. The Internal Revenue Service refunded taxes paid for the years ended in 1988 through 1995.

Rate of Increase in Tuition

The amount paid for each beneficiary who uses a full benefits contract to attend a four-year State Institution of Higher Education will be the resident undergraduate tuition plus mandatory fees. (In this section, "tuition plus mandatory fees" will hereinafter be referred to as "tuition"). Tuition increases reflect management of the colleges as well as general inflation, the rate of increase in state support and real improvements in the quality of educational services. Based on careful analysis, the MET Board adopted a tuition increase assumption allowing for improvement in the quality of education above an expected rate of inflation.

The tuition increase assumption adopted by the MET Board is 6.5 percent for all future years.

SECTION I – SUMMARY

(continued)

New Contracts in Future Years

As of September 30, 2009, the assumption is that there will be no new entrants to this program.

Selection Against the Trust by Purchasers and Beneficiaries

A basic reason for establishing MET is that the purchase of a contract will increase the commitment of the purchaser to a belief the beneficiary will become qualified to enter college, and that the ownership of a contract will cause the beneficiary to be comfortable with a commitment to academic achievement. (This linkage is sometimes referred to as the "Lang effect," after the philanthropist who guaranteed college tuition for a class of students at his alma mater elementary school.)

Selection against the Trust may cause the amount MET pays to exceed WAT. WAT is measured by weighting the tuition at each college by the number of full-time equated Michigan students at that college. The tuition MET pays will equal the WAT if MET beneficiaries attend the Michigan colleges in the same proportions as all Michigan students. On the other hand, if all MET beneficiaries were to attend the University of Michigan, MET would pay tuition much higher than the WAT. Selection refers to the degree to which the MET beneficiaries choose to attend the higher priced colleges, and so cause MET to pay out more tuition benefits.

The cost of selection against the Trust by beneficiaries who attend the Michigan public colleges is offset somewhat by gains from contracts that are terminated. The payments on contracts that are terminated generally are of lower value than the payments on contracts used to attend the Michigan public colleges.

The selection assumption adopted by the MET Board is 10.0 percent for all future years.

Other

This report assumes that the contract provisions applicable to these 1988, 1989, and 1990 enrollments and the Federal income tax status of the Trust will remain the same and will not be changed through State or Federal legislation or regulation. However, the MET Act and Federal tax laws are subject to change.

The tuition structure and other characteristics of the future higher education system used by MET beneficiaries will be identical to the current system.

D. Actuarial Method

The primary purpose of this Report is to estimate the actuarial soundness of the Trust. The method used should be sensitive to long-term trends in the rate of increase in tuition and investment income. It should allow year-to-year fluctuations in experience. The method must be adaptable to a growing Trust, and be such that it will be accepted as a reasonable standard.

SECTION I – SUMMARY

(continued)

E. Historical Summary as of September 30, 2009

| <u>Number of contracts</u> | <u>2009</u> | <u>2008</u> | <u>2007</u> | <u>2006</u> | <u>2005</u> |
|--------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Full benefits | 15,625 | 18,448 | 21,366 | 24,372 | 27,564 |
| Limited benefits | 108 | 125 | 149 | 181 | 205 |
| Community college | <u>388</u> | <u>444</u> | <u>532</u> | <u>625</u> | <u>747</u> |
| Total | <u>16,121</u> | <u>19,017</u> | <u>22,047</u> | <u>25,178</u> | <u>28,516</u> |
| <u>Assets</u> | | | | | |
| Market Value | <u>\$299,200,593</u> | <u>\$365,950,387</u> | <u>\$440,374,436</u> | <u>\$508,937,177</u> | <u>\$575,987,709</u> |

SECTION II – MEASUREMENT OF ACTUARIAL SOUNDNESS

The following table sets forth the Trust's funded status at September 30, 2009:

| | <u>Plan B</u> | <u>Plan C</u> |
|---|----------------------|----------------------|
| 1. Expected present value of the tuition benefit, mandatory fees benefit, and administrative expense liabilities of the Trust, assuming the fund earns 2.2 percent annually * | \$275,546,785 | \$1,152,005 |
| 2. Net market value of assets | <u>\$296,479,209</u> | <u>\$2,721,384</u> |
| 3. Estimated Surplus (Unfunded Liability) as of September 30, 2009 = (2) less (1) | <u>\$20,932,424</u> | <u>\$1,569,379</u> |

- * This figure, which is based on the actuarial assumptions set forth in Section V, represents the net market value of assets required as of September 30, 2009, to provide the benefits and expenses of the program as they become due.

SECTION III – ASSETS

A. Summary of Assets at September 30, 2009

| | |
|---|-----------------------|
| 1. Cash and cash equivalents | \$ 7,120,771 |
| 2. Investments | |
| a. Short-term investments | \$ 140,492,347 |
| b. Unamortized discount on short-term investments | (175,767) |
| c. Bonds | <u>142,442,238</u> |
| Total investments | \$ 282,758,818 |
| 3. Receivables | |
| a. Advances to state general fund | \$ 4,843,910 |
| b. Interest and dividends receivable | 1,188,112 |
| c. Due from others | <u>3,621,617</u> |
| Total receivables | \$ 9,653,639 |
| 4. Liabilities | |
| a. Undisbursed charitable tuition | \$ - |
| b. Compensated absences | 159,579 |
| c. Due to vendors and contract purchasers | - |
| d. Due to others | <u>173,055</u> |
| Total liabilities | \$ <u>332,634</u> |
| 5. Net assets = (1) + (2) + (3) - (4) | \$ <u>299,200,593</u> |

Note: Financial Statement data above provided by MET.

SECTION III – ASSETS

(continued)

B. Changes in the value of assets during the year ended September 30, 2009

| | |
|---|----------------------------|
| 1. Value of assets at beginning of year | \$ 365,950,387 |
| 2. Changes during year | |
| a. Additions | |
| (1) Investment income | \$ 6,766,524 |
| (2) Miscellaneous income | 666,176 |
| (3) Net gain on sale of security | 2,280,201 |
| | <hr/> |
| Total additions = (1) + (2) + (3) | \$ 9,712,901 |
| b. Deductions | |
| (1) Administrative and other expenses | \$ 792,079 |
| (2) Amounts paid under contracts | |
| (a) Tuition reimbursement reinstatements | (248,726) |
| (b) Tuition benefits | 62,975,721 |
| (c) Termination benefits | |
| [1] Paid to colleges | 11,278,379 |
| [2] Death refunds | 7,097 |
| [3] Paid to refund designee | <hr/> 7,126,594 |
| Total termination benefits | \$ 18,412,071 |
| Total paid under contracts = (a) + (b) + (c) | <hr/> \$ 81,139,066 |
| Total deductions = (1) + (2) | \$ 81,931,145 |
| c. Unrealized appreciation (depreciation) | <hr/> \$ 5,468,449 |
| Net increases (decreases) during year = a - b + c | <hr/> \$ (66,749,794) |
| Net value of assets at end of year = 1 + 2 | <hr/> <hr/> \$ 299,200,593 |

Note: Financial Statement data above provided by MET.

SECTION IV – CONTRACT DATA

A. Contract Data Summary

| | <u>Lump Sum</u> | | | <u>Monthly Purchase</u> | | |
|--------------------------------|----------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------|
| | <u>Full Benefits</u> | <u>Limited Benefits</u> | <u>Community College</u> | <u>Full Benefits</u> | <u>Community College</u> | <u>Total</u> |
| Total as of September 30, 2008 | 17,543 | 125 | 416 | 905 | 28 | 19,017 |
| Adjustment for prior years | 472 | 7 | 5 | 19 | 0 | 503 |
| Contracts paid in full | (3,211) | (24) | (58) | (103) | (3) | (3,399) |
| Total as of September 30, 2009 | 14,804 | 108 | 363 | 821 | 25 | 16,121 |

Note: Contract data above provided by MET.

SECTION IV – CONTRACT DATA

(continued)

B. Contracts in Payment Status as of September 30, 2009

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|---|-------------------------------|----------------------------------|-----------------------------------|--------------|
| 1. Michigan Public 4-Year College | | | | |
| Central Michigan University | 559 | 5 | 1 | 565 |
| Eastern Michigan University | 401 | 4 | 2 | 407 |
| Ferris State University | 239 | 0 | 0 | 239 |
| (Kendall Art & Design of Ferris) | 39 | 0 | 0 | 39 |
| Grand Valley State University | 440 | 3 | 8 | 451 |
| Lake Superior State University | 28 | 0 | 0 | 28 |
| Michigan State University | 2,005 | 8 | 2 | 2,015 |
| Michigan Technological University | 162 | 0 | 0 | 162 |
| Northern Michigan University | 122 | 0 | 0 | 122 |
| Oakland University | 348 | 0 | 0 | 348 |
| Saginaw Valley State University | 96 | 1 | 1 | 98 |
| University of Michigan-Dearborn | 164 | 1 | 0 | 165 |
| University of Michigan-Flint | 93 | 0 | 1 | 94 |
| University of Michigan-Ann Arbor | 1,145 | 3 | 1 | 1,149 |
| Wayne State University | 308 | 2 | 1 | 311 |
| Western Michigan University | <u>665</u> | <u>5</u> | <u>1</u> | <u>671</u> |
| Total Michigan Public 4-Year College | <u>6,814</u> | <u>32</u> | <u>18</u> | <u>6,864</u> |
| 2. Michigan Community College | | | | |
| Alpena Community College | 1 | 2 | 1 | 4 |
| Bay De Noc Community College | 5 | 0 | 0 | 5 |
| Delta College | 44 | 0 | 2 | 46 |
| Glen Oaks Community College | 1 | 0 | 1 | 2 |
| Gogebic Community College | 0 | 0 | 0 | 0 |
| Grand Rapids Community College | 74 | 2 | 14 | 90 |
| Henry Ford Community College | 96 | 1 | 4 | 101 |
| Jackson Community College | 24 | 0 | 9 | 33 |
| Kalamazoo Valley Community College | 91 | 0 | 9 | 100 |

SECTION IV – CONTRACT DATA

(continued)

B. Contracts in Payment Status as of September 30, 2009

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|------------------------------------|-------------------------------|----------------------------------|-----------------------------------|--------------|
| Kellogg Community College | 6 | 0 | 4 | 10 |
| Kirtland Community College | 6 | 0 | 1 | 7 |
| Lake Michigan Community College | 12 | 0 | 2 | 14 |
| Lansing Community College | 201 | 0 | 28 | 229 |
| Macomb County Community College | 144 | 2 | 28 | 174 |
| Mid-Michigan Community College | 33 | 0 | 2 | 35 |
| Monroe Community College | 23 | 0 | 1 | 24 |
| Montcalm Community College | 3 | 0 | 0 | 3 |
| Mott Community College | 57 | 0 | 7 | 64 |
| Muskegon Community College | 13 | 0 | 4 | 17 |
| North Central Michigan College | 8 | 0 | 0 | 8 |
| Northwestern Michigan College | 46 | 1 | 7 | 54 |
| Oakland Community College | 250 | 1 | 16 | 267 |
| Schoolcraft College | 155 | 0 | 12 | 167 |
| Southwestern Michigan College | 5 | 0 | 1 | 6 |
| St. Clair County Community College | 27 | 0 | 7 | 34 |
| Washtenaw Community College | 121 | 0 | 8 | 129 |
| Wayne County Community College | 46 | 2 | 3 | 51 |
| West Shore Community College | 1 | 0 | 0 | 1 |
| Total Community College | <u>1,493</u> | <u>11</u> | <u>171</u> | <u>1,675</u> |
| Total Active Contracts | <u>8,307</u> | <u>43</u> | <u>189</u> | <u>8,539</u> |

3. Terminations in Progress

Reason:

| | | | | |
|-----------------------------------|-------|---|---|-------|
| Private College | 579 | 3 | 9 | 591 |
| Out-of-State/Pay College | 1,043 | 6 | 6 | 1,055 |
| Out-of-State/ Pay Refund Designee | 27 | 3 | 0 | 30 |
| Full Scholarship | 77 | 0 | 0 | 77 |
| Not Attending College | 465 | 9 | 5 | 479 |

SECTION IV – CONTRACT DATA

(continued)

B. Contracts in Payment Status as of September 30, 2009

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|--|-------------------------------|----------------------------------|-----------------------------------|-------------------|
| Attend 4-year College with Community College Contract | 0 | 0 | 24 | 24 |
| Attend Community College with Full Benefits Contract | 211 | 3 | 0 | 214 |
| Military Termination | <u>6</u> | <u>0</u> | <u>0</u> | <u>6</u> |
| Total Terminations: | <u>2,408</u> | <u>24</u> | <u>44</u> | <u>2,476</u> |
| Grand Total, Contracts in Payment Status | <u>10,715</u> | <u>67</u> | <u>233</u> | <u>11,015</u> |

Note: Contract data above provided by MET.

SECTION IV – CONTRACT DATA

(continued)

C. Contracts Paid in Full in the Year Ending September 30, 2009

| | Lump Sum | | | Monthly Purchase | | Total |
|--|---------------|------------------|-------------------|------------------|-------------------|--------------|
| | Full Benefits | Limited Benefits | Community College | Full Benefits | Community College | |
| 1. Attended Public Colleges | 2,112 | 23 | 18 | 67 | 2 | 2,222 |
| 2. Terminations | | | | | | |
| Private Colleges | 292 | 0 | 4 | 6 | 0 | 302 |
| Out-of-State/Pay College | 466 | 0 | 1 | 10 | 0 | 477 |
| Out-of-State/Pay Refund Designee | 10 | 0 | 1 | 0 | 1 | 12 |
| Full Scholarship | 44 | 0 | 0 | 3 | 0 | 47 |
| Not Attending College | 214 | 1 | 15 | 11 | 0 | 241 |
| Death | 0 | 0 | 0 | 0 | 0 | 0 |
| Attending 4-year College with Community College Contract | 0 | 0 | 19 | 0 | 0 | 19 |
| Attending Community College with Full Benefits Contract | 68 | 0 | 0 | 6 | 0 | 74 |
| Other | <u>5</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>5</u> |
| Total Terminations | <u>1,099</u> | <u>1</u> | <u>40</u> | <u>36</u> | <u>1</u> | <u>1,177</u> |
| Total Contracts Paid in Full | <u>3,211</u> | <u>24</u> | <u>58</u> | <u>103</u> | <u>3</u> | <u>3,399</u> |

Note: Contract data above provided by MET.

SECTION IV – CONTRACT DATA

(continued)

D. Loan Defaults

| | Full Benefits Contracts | Limited Benefits Contracts | Community College Contracts | Total |
|----------------------------|----------------------------|-------------------------------|-----------------------------------|------------|
| Fiscal Year 1989 | 53 | 0 | 0 | 53 |
| Fiscal Year 1990 | 86 | 1 | 3 | 90 |
| Fiscal Year 1991 | 80 | 1 | 5 | 86 |
| Fiscal Year 1992 | 68 | 0 | 4 | 72 |
| Fiscal Year 1993 | 25 | 0 | 0 | 25 |
| Fiscal Year 1994 | 16 | 0 | 0 | 16 |
| Fiscal Year 1995 | 20 | 0 | 0 | 20 |
| Fiscal Year 1996 | 4 | 0 | 0 | 4 |
| Fiscal Year 1997 | 8 | 0 | 0 | 8 |
| Fiscal Year 1998 | 9 | 0 | 0 | 9 |
| Fiscal Year 1999 | 11 | 0 | 0 | 11 |
| Fiscal Year 2000 | 6 | 0 | 0 | 6 |
| Fiscal Year 2001 | 0 | 0 | 0 | 0 |
| Fiscal Year 2002 | 0 | 0 | 0 | 0 |
| Fiscal Year 2003 | 0 | 0 | 0 | 0 |
| Fiscal Year 2004 | 0 | 0 | 0 | 0 |
| Fiscal Year 2005 | 0 | 0 | 0 | 0 |
| Fiscal Year 2006 | 0 | 0 | 0 | 0 |
| Fiscal Year 2007 | 0 | 0 | 0 | 0 |
| Fiscal Year 2008 | 0 | 0 | 0 | 0 |
| Fiscal Year 2009 | 0 | 0 | 0 | 0 |
| Total Loan Defaults | <u>386</u> | <u>2</u> | <u>12</u> | <u>400</u> |

Note: Contract data above provided by MET.

SECTION V – ASSUMPTIONS AND METHODS

I. Assumptions

A. Discount Rate Applied to Expected Future Cash Flows to Determine Present Value

1. Assumption – Annual investment yield relating to market value of assets is 2.2%.
2. Basis – Pursuant to analysis of the Michigan Department of Treasury, Bureau of Investments and adopted by the Board at their October 2009 meeting, this rate approximates the expected investment yield over the lifetime of the present contracts.

B. Tax Status

1. Assumption – MET is exempt from Federal income tax.
2. Basis – On November 8, 1994, the U.S. Court of Appeals for the Sixth Circuit ruled that MET is not liable for Federal income taxes. The Internal Revenue Service has refunded taxes paid for the years ended in 1988 through 1995.
3. Comment – Future Federal income tax law changes may affect the taxation of the Trust.

C. Bias – (e.g., disproportionate use of University of Michigan and Michigan State University)

1. Assumption – MET will pay tuition benefits that equal 110.0% of MET WAT.
2. Basis – Adopted by MET Board from analysis of prior experience.
3. Comment – There are mitigating circumstances that may prevent higher rate:
 - a. Large number of contracts in force.
 - b. High acceptance standards at University of Michigan (e.g. compared to highest priced college in Ohio and Alabama).
 - c. Limit as to how many may attend University of Michigan and Michigan State University.

SECTION V – ASSUMPTIONS AND METHODS

(continued)

D. Contract terminations

1. Assumption

Distribution of Contract Terminations

| Refund Type | Full Benefits | Limited Benefits | Community College Benefits |
|-------------|---------------|------------------|----------------------------|
| 1 | 25% | 25% | 10% |
| 2 | 44% | 18% | 11% |
| 3 | 27% | 47% | 29% |
| 4 | 4% | 10% | 0% |
| 5 | 0% | 0% | 50% |

Description of Refund Type

| Refund Type | Amount of Refund | Termination Code & Code Description |
|-------------|--------------------------|--|
| 1 | Weighted Average Tuition | 1 - Attend Michigan independent college – direct refund to college |
| 2 | Average Tuition | 2 - Attend out of state college – direct refund to college 4 - Full scholarship |
| 3 | Lowest Tuition | 3 - Attend Michigan independent or out of state college – direct refund to refund designee 5 - Will not attend college 10 - Other (military) |
| 4 | Lowest Tuition | 7 – Purchase full or limited benefit, but attend community college |
| 5 | Community College WAT | 8 – Purchase community college, but attend 4-yr public college |
| 6 | Lowest Tuition | 6- Death or disability |

2. Basis – Based on analysis of prior terminations.

3. Comment – An assumption is made for the number and timing of terminations to which this distribution is applied. The termination assumptions are significant for the valuation because the amount paid by MET is less for terminations than for use at four-year Michigan public colleges. See Section VI – Contract Provisions Valued.

E. **Death and Disabilities** – Mortality rates for beneficiaries are assumed to follow the 1990-1991 U.S. Life Tables.

F. **New Contracts** – Assumed that no new contracts are sold

SECTION V – ASSUMPTIONS AND METHODS

(continued)

G. Expenses

1. Assumption – \$2,227,138 in total for MET I and MET II, inflated at 3.5% per year for inflation. Total expenses are split between MET I and MET II according to the number of active contracts expected in each subsequent year, with appropriate recognition for a portion of the future expenses being applied to contracts not yet sold.
2. Basis – Budgeted expenses for Fiscal Year 2009 – 2010, reduced for a portion of the Advertising and Public Relations expenses, as the majority of these expenses are assumed to apply to future contract sales.

H. Use of Credits

1. Assumption

| Year Since Matriculation | <u>Distribution of Credit Utilization per Number of Years Purchased</u> | | | |
|-----------------------------|---|-----------------------|-----------------------|----------------------|
| | <u>4 yrs purchase</u> | <u>3 yrs purchase</u> | <u>2 yrs purchase</u> | <u>1 yr purchase</u> |
| 1 | 24% | 33% | 45% | 85% |
| 2 | 24% | 25% | 30% | 10% |
| 3 | 20% | 18% | 15% | 5% |
| 4 | 18% | 12% | 5% | |
| 5 | 7% | 7% | 5% | |
| 6 | 3% | 3% | | |
| 7 | 2% | 2% | | |
| 8 | 1% | | | |
| 9 | 1% | | | |

2. Comment – Students can be expected to delay use, thus providing a benefit to MET. However, an offsetting factor seems to be developing as a meaningful number of students who attend colleges with block pricing take the minimum number of credits each term to enable them to remain full-time.

I. Tuition Increase Assumption

1. Assumption – 6.5% for all future years.
2. Basis for Assumption – The MET Board adopted this assumption at their October 2009 meeting.

J. Loadings to Reflect Experience

We now have enough experience of beneficiaries attending college under a MET contract to analyze whether two features of the program will likely cause greater payments than expected. These two features are a) the ability of a beneficiary to attend a college for which block pricing is in effect resulting in the possibility of having the program pay for more years than purchased

SECTION V – ASSUMPTIONS AND METHODS

(continued)

and b) the ability of a beneficiary to have more than 120 credits covered (even though, for example, four years of coverage was purchased) due to being in a specific program requiring more than 120 hours for an undergraduate degree (e.g. Engineering). The appropriate load on liabilities to reflect these features is assumed to be 2.0%.

II. Actuarial Method

The present value of future benefits is determined by projecting the weighted average tuition cost including mandatory fees at the assumed annual rate of increase and then calculating the expected present value of the future distributions from the Trust based on the investment income and discount rate assumptions.

The value of the Trust assets is determined by the Trust. In the September 30, 2009 valuation, the assets consist primarily of U.S. Treasury bonds and corporate bonds.

The present value of future benefits is compared to the value of assets. In this valuation, a balance is established equal to the difference between the value of the assets and the present value of future benefits. This balance is a measure of the actuarial soundness of Plans B and C.

SECTION VI – CONTRACT PROVISIONS VALUED

A. Issue Years 1988, 1989 and 1990

B. Benefit Provisions

1. Full Benefits Plan

- | | |
|-----------------------------------|--|
| a. Michigan Public 4-Year College | Full benefits plan provides for tuition and mandatory fees for number of years specified in the contract, from one to four years. |
| b. Community College | If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on options selected by the beneficiary. |
| c. Michigan Independent College | If the beneficiary elects to attend a Michigan independent college, the contract may be terminated, and MET will pay tuition to the independent college based on the weighted average tuition cost. If the payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay to the college four annual installments based on the average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition. |
| e. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay four annual installments based on the average tuition cost. |
| f. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the lowest tuition cost. |
| g. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost |

SECTION VI – CONTRACT PROVISIONS VALUED

(continued)

2. Limited Benefits Plan

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| a. Michigan Public 4-Year College | Limited benefits plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to four years not to exceed 105% of the WAT. However, if tuition and mandatory fees exceed 105% of the WAT, the beneficiary is provided a reduced amount of credit hours. |
| b. Community College | If the beneficiary elects to attend a community college, MET will pay the community college tuition cost or the lowest university tuition cost, depending on options selected by the beneficiary. |
| c. Michigan Independent College | If the beneficiary elects to attend a Michigan independent college, the contract may be terminated, and MET will provide funds to the independent college based on the weighted average tuition at the colleges with tuition less than 105% of the weighted average tuition. If payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |
| e. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |
| f. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the lowest tuition cost. |
| g. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay four annual installments based on the lowest tuition cost. |

SECTION VI – CONTRACT PROVISIONS VALUED

(continued)

3. Community College Plan

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| a. Community College | Community college plan provides for tuition and mandatory fees for the number of years specified in the contract, from one to two years. |
| b. Other Michigan College | If the beneficiary elects to attend a Michigan four-year public college or a Michigan independent college, the contract may be terminated, and MET will pay tuition to the college in two annual installments as needed based on the community college weighted average tuition cost in the year prior to the contract termination. |
| c. Out-of-State College | If the beneficiary elects to attend an out-of-state college, the contract may be terminated, and MET will pay to the college two annual installments based on the community college average tuition cost. If payment is not made to the college, the amount will be based on the lowest tuition. |
| d. Full Scholarship | If the beneficiary receives a full scholarship, the contract may be terminated, and MET will pay two annual installments based on the community college average tuition cost. |
| e. Death or Disability | If the beneficiary dies or has a disability which renders the beneficiary incapable of attending college, the contract may be terminated, and MET will pay one installment based on the community college lowest tuition cost. |
| f. No College | If the beneficiary does not attend college, the contract may be terminated, and MET will pay two annual installments based on the community college lowest tuition cost. |

SECTION VI – CONTRACT PROVISIONS VALUED

(continued)

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| C. Transferability | If the contract is transferred to an older beneficiary, MET may charge additional costs, which include a transfer fee, the cost differential between beneficiary ages/grades and MET's loss of investment income. If the older beneficiary accepts the academic year of the original beneficiary, the additional cost can be waived. |
| D. Loans | If a purchaser defaults on a loan secured by the contract, MET will reimburse the savings institution for the default, and will reduce the amount of benefits purchased in proportion to the amount remaining after the payment to the savings institution. |
| E. Monthly Purchase | The purchaser of the monthly purchase contract purchases a percent of educational benefits with every monthly purchase amount which is received by MET. A purchaser may choose to make monthly payments over 4, 7 or 10 years. |